The Six Epochs of Writing

ILLUSTRATED IN COLORS

PUBLISHED BY
THE PARKER PEN COMPANY
JANESVILLE, WISCONSIN

The Story of Writing

The evolution of instruments for writing, from the first stone chisel to the most perfect type of self-filling fountain pen, covers the history of all mankind.

Undoubtedly the first faint glimmer of the idea of writing came to some prehistoric ancestor as he became interested in the markings made by a sharp stick in the soft sand of some river bank.

It is interesting to note that this most primitive of all forms of writing was in use as late as the early part of the nineteenth century, when school children in the primary grades performed their arithmetic "examples" upon the smooth surface of moist sand in boxes. When an example was completed, the surface of the sand was smoothed over ready for the next.

Chisel and Mallet

The desire to make the record more permanent lead prehistoric writers to turn from shifting sands to rocks and stones, and the next step in the development of writing, was the carving or scratching of pictures on stone, from three to four thousand years before Christ, or some five or six thousand years ago.

Here again we see in the slates and slate pencils universally used by school children in the lower grades up to the last decade of the nineteenth century, and in the chalk and blackboards used today, almost the exact counterpart of the writing materials used thousands of years ago.

Permanent Records With Less Labor

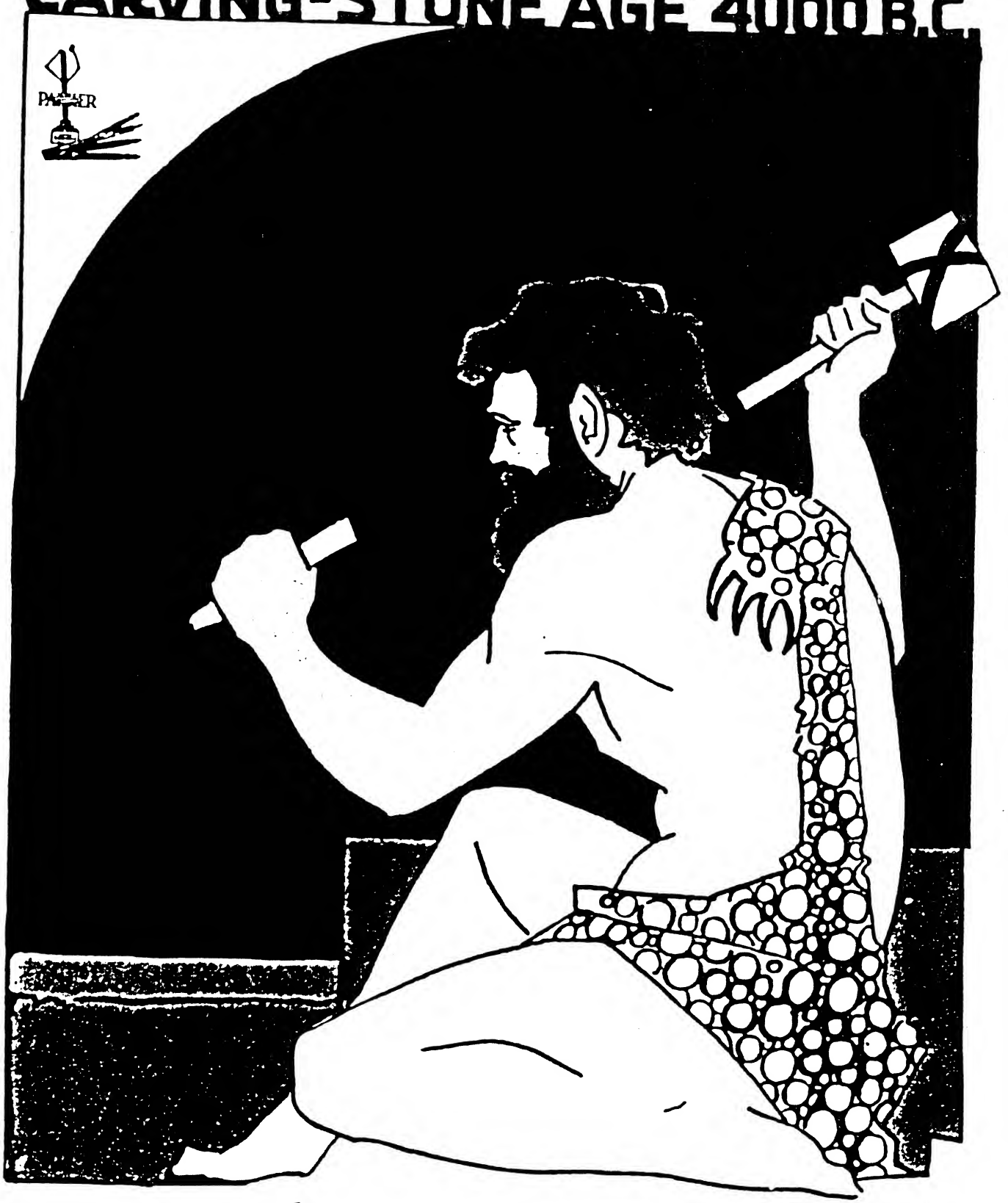
The soft sand or mud of the river bank or sea shore was easy to mark upon, but the record had no permanence; the rock walls gave permanence, but necessitated long labor in order to make the record. Therefore some prehistoric mind conceived the idea of marking with a sharp point upon mud or clay when it was soft, and then baking it to permanent hardness in the sun or in an oven.

These early records are found on the ruins and monuments of ancient Egypt and Assyria and also in the ruined cities of the Incas of Peru and the Aztecs of Mexico. Explorers have found writings cut into bone and ivory by the Esquimaux—a rude picture writing of their own.

Later on, these writings in stone and clay were done by signs and syllable letters, by the Egyptians, Babylonians and Persians, and also, it is believed by the Chinese.

THE SIX EPOCHS OF WRITING

CARVING-STONE AGE 4000 B.C.



The Beginnings of An Alphabet

As these pictures multiplied, certain ones were taken to represent the same idea every time the picture was used. From this the Phoenicians, starting with the later Egyptian pictures which expressed ideas, worked out something equivalent to our alphabet. Scientists call the symbols ideagraphs and later ones are called hieroglyphics.

Primitive picture ideograms passed through the successive stages of phonograms and syllabic signs till they finally developed into letters. All signs are believed to have been ideographic in their origin, as are the Chinese characters and the hieroglyphs of the ancient Egyptians. The picture-writing of the Mexicans gave birth to a family of ideographic forms.

Some of the hieroglyphs pictured the objects they represented; others, conceptions suggested by those objects; others, ideas having names identical with or closely resembling the names of the objects represented; others, part of the sounds composing these names, or even only their initial sounds —these last being nearly a true alphabet.

How Letters Were Evolved

An illustration of the way in which the letters of the alphabet were evolved from pictures representing certain objects may be cited in the letter S, believed to have been evolved from a representation of a snake, whose hissing is preserved to this day in the sibilant sound of the letter.

The first clear alphabet in which a sign represented only a sound and several signs were put together to make a word, is found in the Hebrew writings, which are assumed to have been developed from the Phoenicians.

The word alphabet is a combination of the first two letters of the Greek alphabet, alpha and beta. It is quite the same as our expression "learning your A B C's," and is like calling the list of letters "The A B's."

The word letter is derived from a Latin verb meaning to smear, spread or rub over, thus indicating a character engraved with a stilus smeared or spread on parchment.

The Greeks developed two different alphabets, the eastern Greeks using a long one, the western Greeks a shorter alphabet which was made known in Italy by travelers and adopted and changed by the Romans to fit their Latin language. From this our own alphabet has developed.

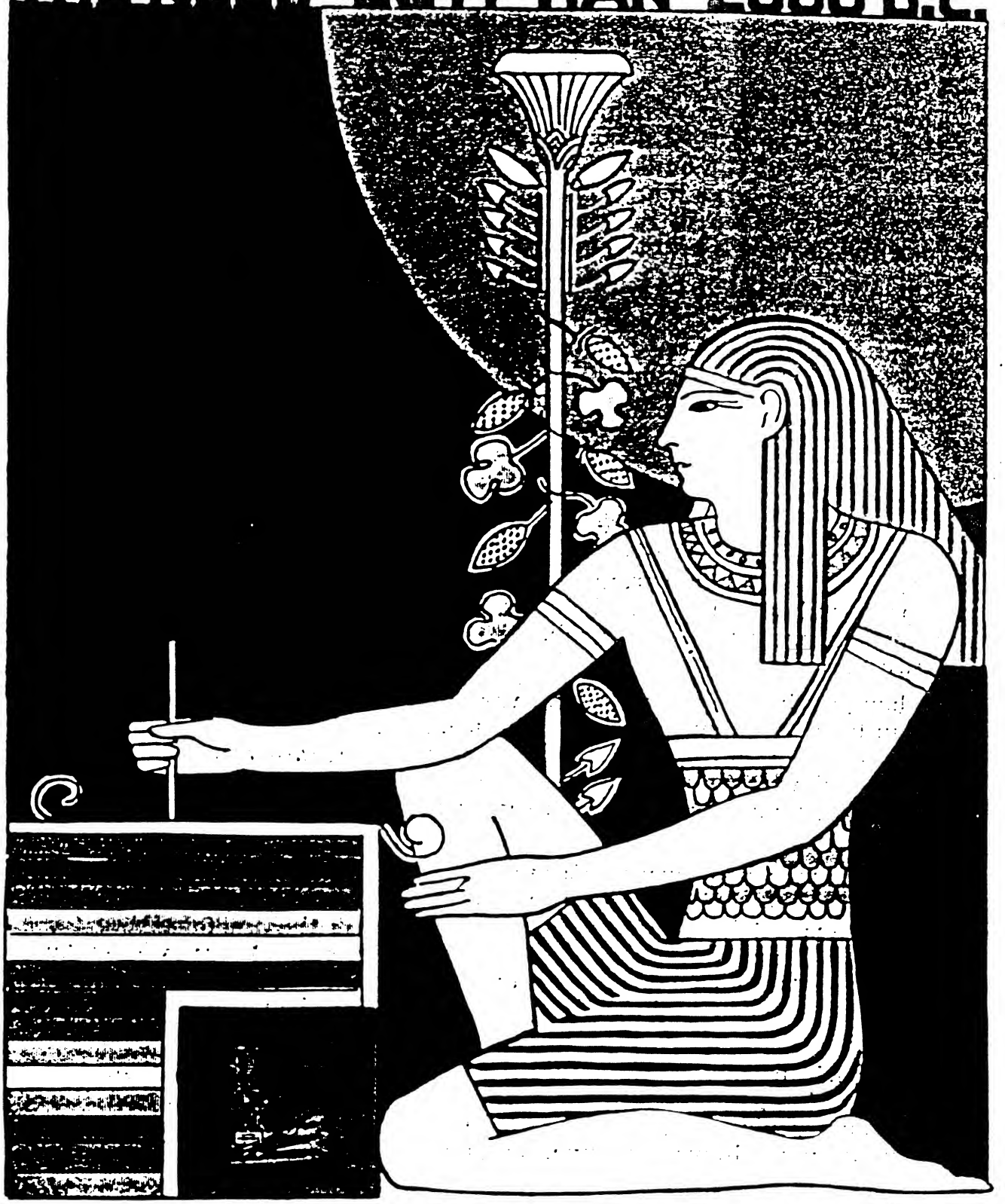
The Earliest Writing Instrument

The earliest real writing instrument was the stilus, a pointed bodkin of metal, bone or ivory, used for engraving letters on boxwood tablets covered with wax.

Later, the Egyptians began to use a brush and paint on leaves of the plant called papyrus. The hollow tubular stalk of grasses growing in

THE SIX EPOCHS OF WRITING

THE REED - EGYPTIAN 2000 B.C.



marshy lands was the true ancient representative of the modern pen. Hollow joints of bamboo were similiarly employed.

One writer, Chardin, speaks of the reeds which grow in the marshes of Persia and which are sold an much sought after in the levant particularly for writing.

Chardin says, "their writing pens are made of reeds or small hard canes of the size of the largest swan quills which they cut and slit in the same manner as we cut the quills. These canes or reeds are collected along the Persian Gulf in a large fen. They are cut in the month of March and when gathered are tied up in bunches and buried for six months, when they harden and assume a beautiful polish and color."

Still later, sheepskin, or parchment, was used with brush and paint. This was about 700 B. C.

About this time the western world became aware of the Chinese use of paper, on which the markings were made with a brush and a form of ink. No one knows at what an early date the Chinese began using this, but from that time on, paper has been the universal writing material.

From Brush and Paint to Pen and Ink

The transition from brush and paint to pens and ink was gradual. The word pen comes from the Latin penna, a feather, and, as everyone knows, the first pens were made from feathers, the quill end neatly whittled down to a point and split at the end. That is why small knives are today called pen knives; they were indispensable in the days when everyone had to make his own pens.

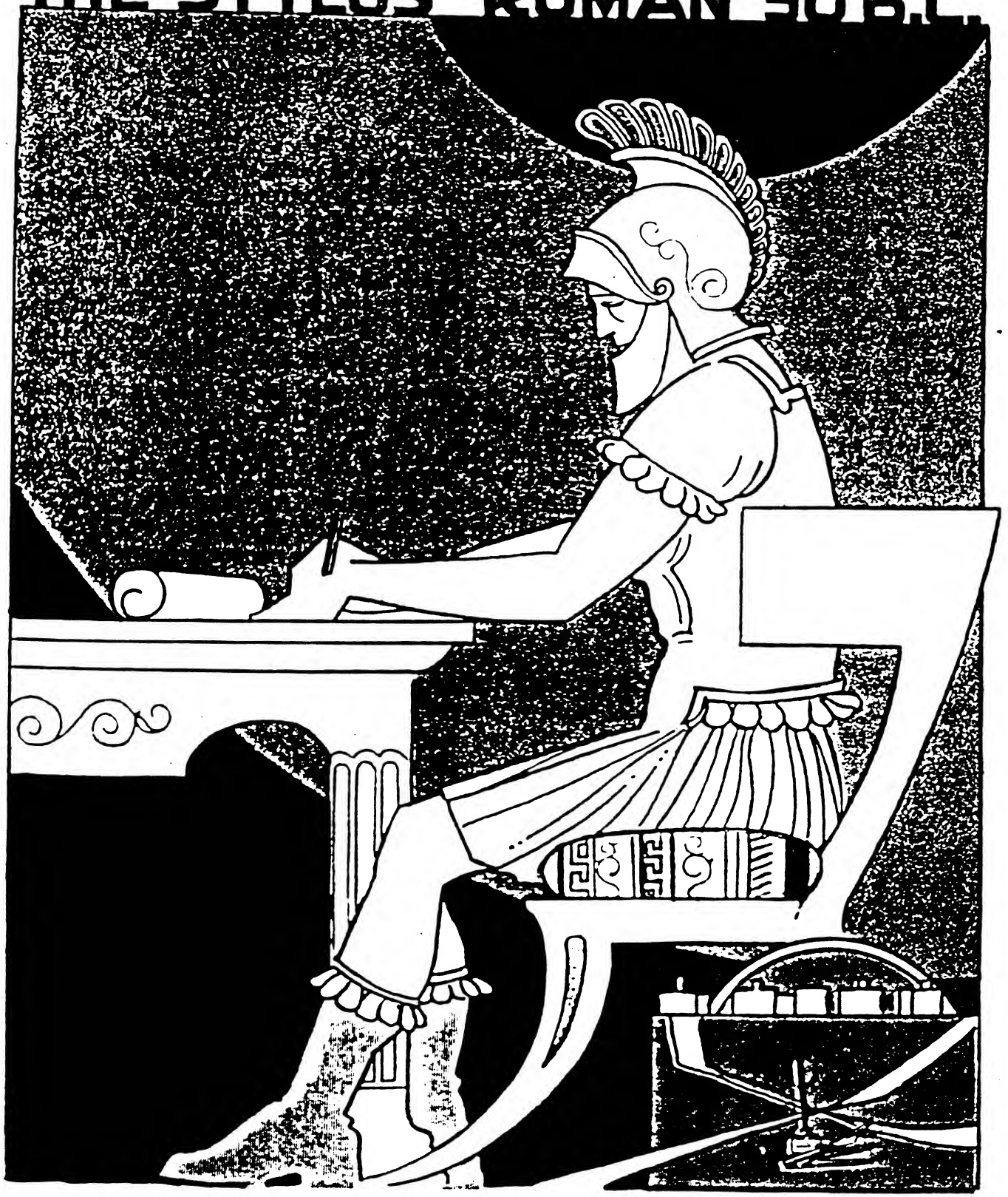
Although a bronze fountain pen was found in the ruins of Pompeii, and this can be seen today in the great museum in Naples, metallic pens were little used. The quill pen in early use in the sixteenth century continued the principal writing instrument for twelve hundred years or until long after the middle of the nineteenth century when the steel pen made its appearance.

Machine-made pens were introduced about 1845, but it was not until about 1860 that their manufacture was begun on a large scale, in the United States. Gold pens were introduced early in the nineteenth century, but it was not until a process of fusing the gold around points of iridium was perfected that they were widely used, as although gold is extremely resistant to corrision, making the pen very durable, the metal is too soft for the points.

Away back in 1808 Byran Donkin applied for and obtained the first patent for metallic pens. He claimed a pen of a new construction and stated that this pen could be made of any metal or material fitted for the purpose. The pen did not achieve a commercial success.

THE SIX EPOCHS OF WRITING

THE STYLUS-ROMAN 50 B.C.



Later came the Perry pen which was patented in 1830. This pen became a success and is known to have a wide distribution. Later came the Gillott and the Esterbrook, which are known practically to every school child in the country and are perhaps the standard steel pens of today.

Gold Pens

Gold pens were introduced early in the nineteenth century, but it was sometime before the process of manufacturing gold pens was perfected. It was realized that gold was the only metal which apparently would be safe to use with a view to permanency in the manufacture of pens, and the view still holds.

Gold, however, being so soft, could not be used for writing as the tips would soon wear away and the point become exceedingly blunt. Therefore it was a question of finding metal which could be used for the points of the pen that would combine hardness and be able to resist the acids used in ink.

The only metal that has ever been successfully used up to date is a metal known as iridium. So hard is this metal that pens tipped with it are frequently called "diamond pointed."

This metal in a large commercial way comes from the Ural mountains in Russia, although small amounts are found in South America, New Zealand and Australia. An ounce of first quality hard iridium during the war period has sold as high as $330. In normal times its value runs from $60 to $100 an ounce, so it is much more valuable than gold.

The First Fountain Pen

Fountain pens were manufactured under the name of "fountain ink pens as far back as the eighteenth century, but it was not until a hundred years later that inventors applied themselves seriously to their construction. All sorts of crude devices were made use of by the early inventors and in comparison with the modern fountain pen of today, look exceedingly crude.

The patent office in the fifties, discloses that one of the early applicants to whom a patent was granted for a fountain pen was one Warren, who made a pen quite similar to the fountain pen elsewhere alluded to as being shown in the museum at Naples.

Then a little later there was Hamilton who invented the fountain pen which claims specifically the use of capillary attraction applied to a fountain pen.

Then still later came the English invention of McKinnon, who was one of the pioneers in fountain pen making. A man by the name of Fischer was the earliest of which we have record of any inventor who applied capillary slits in the bottom of the feed channel for the specific purpose of drawing ink from the reservoir to the nibs or slit in the pen.

THE SIX EPOCHS OF WRITING

THE QUILL - MEDIEVAL 1500

These inventors were followed by many others, such as the Prince, Hardcastle, Shaw, Livermore, and a maze of others.

How Pens Write

The action of any pen is dependent upon the force known as capillary attraction (from the Latin capillus, a hair,) which causes a liquid to move along in any direction if given a small enough space between objects that attract it.

It is the force which causes ink to creep up into a blotter, water to be drawn up into a towel, one end of which is immersed, and oil to be drawn up the wick of a lamp into the flame.

It is explicable proximately by cohesion or surface tension, due to the difference between the attraction exerted by the molecules of the fluid upon each other and that exerted upon them by the contiguous object.

Causes Pen To Retain Ink

It is capillary attraction which causes a pen to retain the ink, allowing it to flow downward onto paper only as fast as it is required to form the letters, instead of all running down off the pen at once.

It is the slit in the pen point which makes it possible to utilize this principle of capillary attraction. When the slit is closed, as when the pen is not is use, the ink is held on the pen; but when the points are pressed on the paper in writing, the slit is continually opened and closed, increasing and decreasing the amount of capillary attraction exerted upon the ink, so that it is fed into the paper exactly as it is needed to form the letters—more rapidly when the points are pressed upon the paper with more force, more slowly when the pressure is lighter.

The Pressure of the Atmosphere

But the weight of all the ink contained in the barrel of a fountain pen is so great as to overcome the cohesion which holds the ink on the pen, and all the ink would run downward and flood the pen, were it not for the pressure of the atmosphere.

Everyone is familiar with the way a liquid flows out of a small-mouthed bottle only as fast as bubbles of air ascend through the liquid to fill the space vacated. Exactly the same principle operates in a fountain pen, to regulate the flow of ink down onto the pen, by admitting just enough air into the barrel of the pen to release the ink as it is required.

This is accomplished by means of a feed bar, the upper end of which extends into the reservoir while the lower end, pressing upon the pen, exerts a capillary action which allows the ink to flow down exactly as it is needed.

In the light of present day development, these old pens look very crude and cumbersome. In fact the fountain pen industry underwent much the

THE SIX EPOCHS OF WRITING

THE STEEL PEN - 1846 A.D.

same transformation as regards practicability and refinement as did the manufacture of automobiles. In the early nineties of the century just closed, Mr. Geo. S. Parker invented, patented and trademarked what has proven to be the most practical, the most simple and probably the best working pen yet produced. It was given the name of Parker Lucky Curve on account of the peculiar curve of the feed bar containing the ink channel. This "Lucky Curve" has done away with one of the most annoying defects of former fountain pens—that of the ink collecting under the cap when the pen is not in use, and staining the fingers when the cap is removed.

In the Parker Pen feed bar is an ink channel. In the bottom of this channel are two tiny slits extending throughout its length. These capillary slits draw the ink from the reservoir down to the slit in the pen. As the ink is drawn out of the barrel by these little capillary feeders, provision must be made to permit a corresponding amount of air to enter the barrel to replace the ink drawn out. This is done by cutting a little oval or heart shaped hole in the pen where the slits terminate. The air enters in the form of elongated bubbles and passes up the feed channel and into barrel.

Until Mr. Parker hit upon the "Lucky Curve," there was no way, when the pen was replaced in the pocket, of making all the ink that was on the pen and in the capillary slits and feed bar run back into the reservoir.

When the pen was reversed and placed in the pocket, the air within the barrel expanded, on account of the warmth of the body and forced the ink upward around the pen and spilled over the nozzle, so that when the cap was removed, stained fingers resulted.

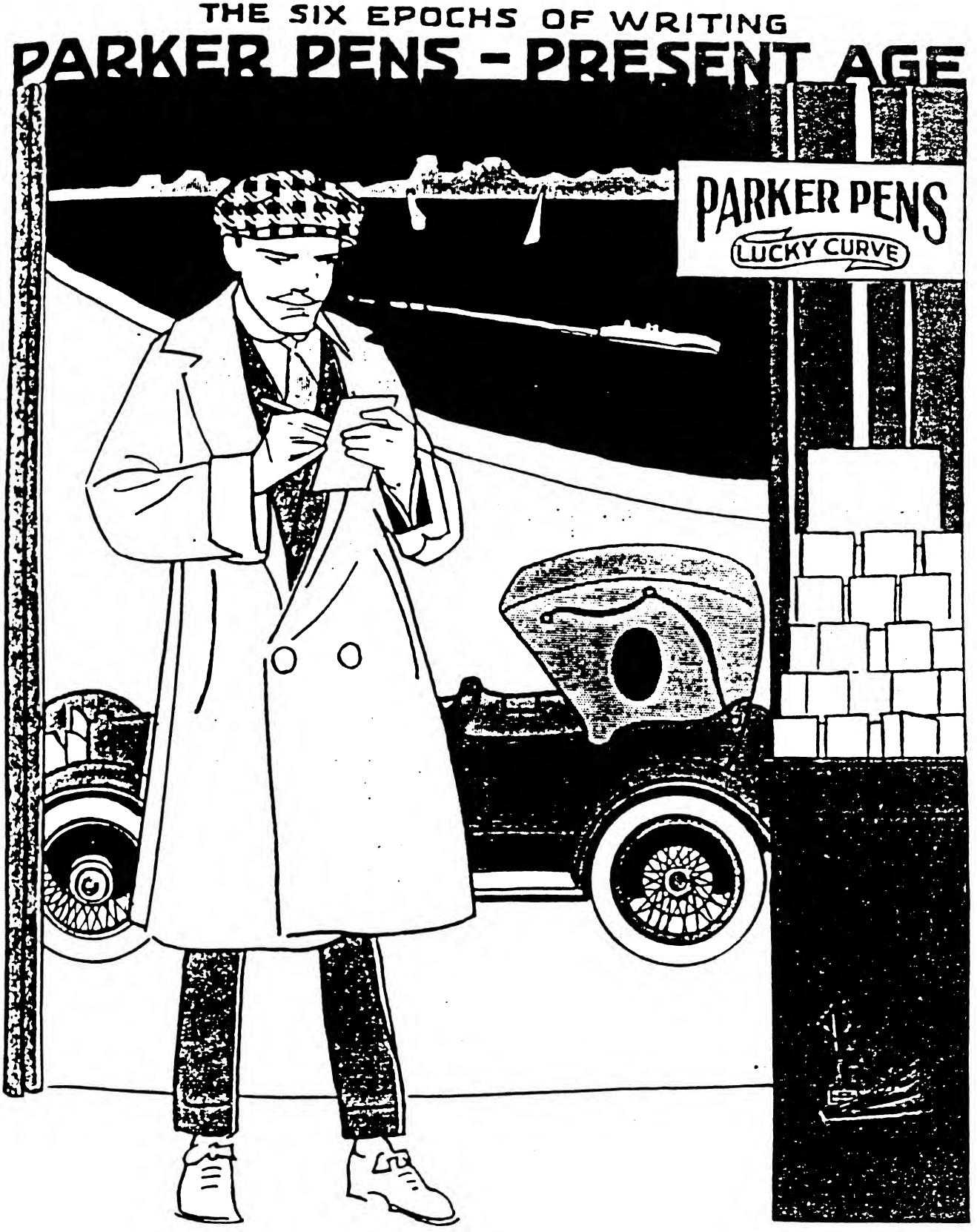
But in the Parker Pen the feed bar is curved at the end which extends up into the ink reservoir, so that the end of this curve touches the wall of the barrel. This provided a continuous capillary passage which bridges the gap between the end of the nozzle and the wall of the barrel, and consequently all the ink that was on the pen and in the feed bar and slits is drained down into the reservoir, leaving the nozzle clean when the cap is removed.

The Perfecting of the Self-Filler

The next step in the development of the modern fountain pen was the perfecting of the self-filler, doing away with the necessity of unscrewing the nozzle and filling the barrel by means of an ink dropper. In the modern self-filler the barrel of the pen takes the place of the glass tube and the soft rubber reservoir is placed inside the barrel.

In earlier types of self-fillers the reservoir inside the barrel was squeezed by means of a spring or lever, set in an opening cut in the wall of the barrel.

But there were several disadvantages connected with this style of self-filler. The soft rubber reservoir inside cannot possibly last as long as the hard outside barrel of the pen, and the day will always come when the soft rubber will crack and the ink will leak through the lever hole in the wall of the barrel and ruin the clothes.


THE SIX EPOCHS OF WRITING
PARKER PENS - PRESENT AGE
PARKER PENS
LUCKY CURVE

The Parker Safety-Sealed

In the Parker "Safety-Sealed Pen, the lever which squeezes the rubber sack comes out at the top of the barrel, in the form of a button, covered by **an ink tight safety cap or seal.** To fill the pen, you simply unscrew the cap, place the point of the pen in ink and press the button, then release and hold the pen in the ink for two or three seconds.

The Safety-Sealed arrangement appeals to every practical person who understands its function. It is a well known fact that the soft rubber sac or reservoir cannot possible last as long as the outside hard rubber case. In fact it will probably have to be renewed several times during the life of the pen.

Should the rubber sac give out at a time when the owner found it difficult to get repairs for a fountain pen having a lever and open lever hole, the pen would, so far as its use as a fountain pen was concerned, be put out of commission entirely. Any fountain of the self-filling type which has an exposed opening in the barrel for the reception of the presser bar mechanism, such as a slit or hole, is far short of what a pen should be. It will quickly be seen that in such a pen the ink leaking out of the damaged or worn out sac inside would immediately run out thru the slit of the barrel.

In the Parker Safety-Sealed pen this difficulty is overcome entirely. The "button" which operates the presser bar is in the end of the fountain opposite the pen point. **It is secluded and sealed in by an air and ink tight cap.**

Do you realize what this means?

The fountain in case of accident to the rubber sac, **automatically changes from a self-filler to a non self-filler** without preceptible loss of time or service. When convenient opportunity presents, the pen can again be converted into a Safety-Sealed Self-Filler.

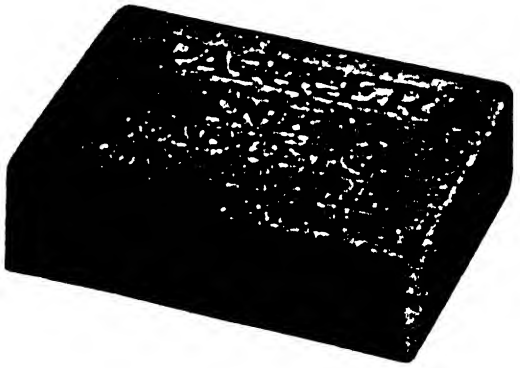
Do you wonder that soldiers prefer such a pen? Everyone else for that matter when they understand the vast difference between the Parker Safety-Sealed and those not so equipped.

This arrangement also protects the rubber sack itself, so that it lasts much longer than when it is exposed to air, heat and perspiration through the **hole in the side** of the barrel.

The Fountain Pen In Military Service

For the modern soldier and sailor, a good fountain pen is indispensible equipment; but it must be a pen that is adapted for military service—one that will not leak or get out of order easily, that will stand the rough usage it is sure to get.

The important improvement embodied in the Parker Safety-Sealed Self-Filler have made it the preferred pen in all ranks and all branches of the service and it has become known as "the pen of military efficiency." It is today the most highly perfected type of writing instrument, the most modern development of the chisel and mallet of six thousand years ago.



Ink Tablets

Ink Tablets follow closely the use of the fountain pen. It is better to use the best fluid ink obtainable, but when this is not available, as is the case with soldiers and travelers, Ink Tablets should always be provided. Parker Ink Tablets are conveniently put up in small neat boxes or tubes and sell **36 for 10c.** One or two tablets with water sufficient to fill the barrel will make an excellent quality of ink.

Clips

The Parker Washer Clip is as much in advance of the ordinary pen clip as the Parker Pen superior to the old type of hole in the fall fountain pen.

It fits only Parker Pens, as the clip is held in place between the patented safety cap and the outer cap—like a washer. Not a rivet or screw or clamp! Can be put on or taken off at will. Made of fine metal, beautifully nickeled, and sells in all sizes at only 25c each.

No.20—Parker Jack Knife Safety self-filler (or regular). Price $2.50. Full or medium lengths.

No. 23½—Parker Jack Knife Safety Self-filler (or regular). Price $3. Full length. Fancy chased barrel.

No. 24½—Parker Jack Knife Safety Self-filler (or regular). Price $4. Medium or full length. Bakelite Transparent barrel. $1 extra.

No. 25—Parker Jack Knife Safety Self-filler (or regular). Price $5 With Parker Washer Clip 25c extra.

PARKER LUCKY CURVE

Trench Pens

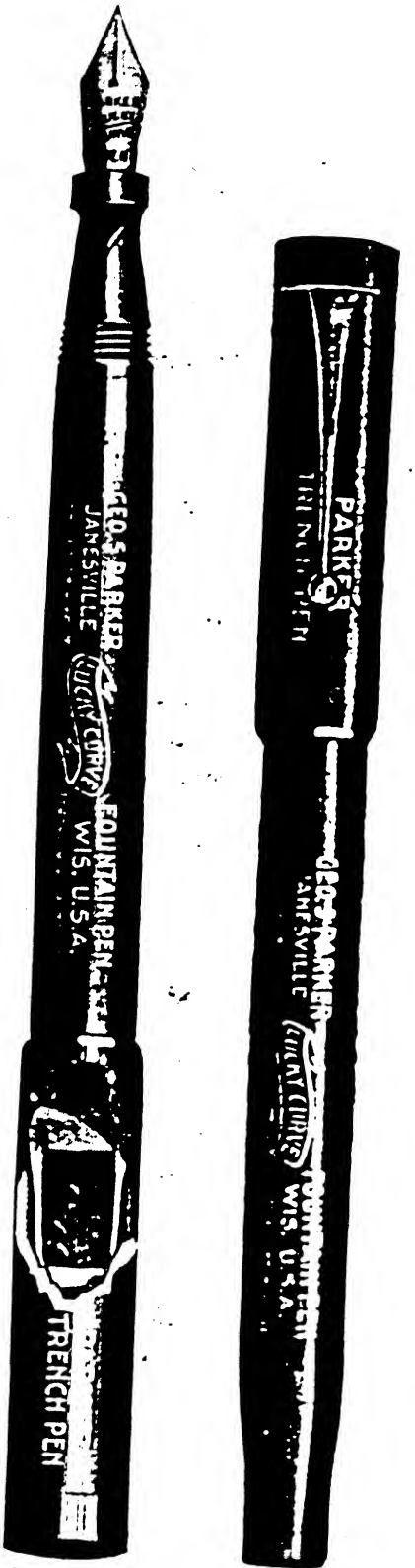
Non Self-Filling

These cuts represent a new need in pen making. Developing out of the need of the war. A fountain pen that carries its ink supply in the attachment in the end of the fountain. The cut shows so clearly that farther description is unnecessary. Vast numbers of soldiers carry them and manufactre own ink, by simply taking out two tablets and putting them in the reservoir, **then fill with water.** The price of such a pen is $2.75. With clip 25c extra. The next size is $3.75, and the next $4.25, and a still larger size is $5.25.

Parker Pens may be purchased in almost any city in the United States, and are also sold in all civilized foreign countries.

THE PARKER PEN COMPANY

JANESVILLE, WISCONSIN



Sectional View showing ink tablet attachment

Closed